



Integrated Waterbird Management & Monitoring

Highlights for 2014-15

Modeling

- ❖ Continental Migration Model (Lonsdorf et al. 2015, *Ecological Applications*)
 - Framework, validation, code conversion, model extensions (e.g., climate, food depletion curves)
- ❖ Bird Survey Simulation Model
 - Evaluated power of alternative count protocols; developed detection probability study design
- ❖ Local Abundance Models (Aagaard et al. 2015, *Wildfowl*)
 - Developed models explaining variation in local abundance of waterbirds counted via IWM
- ❖ Local Scale Multi-Unit Decision Support Model
 - Developed local cases studies and draft reports for multi-unit decision support at two National Wildlife Refuges (Clarence Cannon NWR & Mattamuskeet NWR)
- ❖ Modeling Support: Examine Utility of Local Data for Regional Summaries
 - Developing multiple reports (e.g., bird use-days calculations, maps, community composition)

Monitoring & Training

- ❖ National Protocol Framework for Inventory and Monitoring of Nonbreeding Waterbirds and their Habitats
- ❖ Habitat Protocol Validation Studies (Tavernia et al. 2015, *Wetlands Ecology and Management*; and underway)
- ❖ Completed several field training sessions for participants on unit condition and annual habitat protocols

Data Management

- ❖ Developed IWM online database and reporting tools as a node of the Avian Knowledge Network
 - Made project set up and data entry sections available to participants
 - Provided detailed training and documentation for use
 - Beta tested reporting tools (e.g. bird migration curves, bird use days, unit conditions, vegetation survey)

Communications

- ❖ Developed new IWM website: www.iwmmprogram.org
- ❖ Multiple presentations on IWM updates to targeted audiences (e.g., NWRS, Mig Birds, JVs, Flyway Technical Sections/Councils, AFWA, Waterbird Society)
- ❖ Multiple short communications (e.g., factsheets, annual reports, publication summaries, blogs, e-newsletters, FAQ)

Administration

- ❖ IWM formally adopted by NWRS Natural Resource Program Center
- ❖ Transitioned from pilot study to operational program

For more information, contact Linda Wires, Project Coordinator, Linda_Wires@fws.gov, www.iwmmprogram.org